



PATENT ABSTRACTS OF JAPAN

(11) Publication number: **08281021 A**(43) Date of publication of application: **29.10.96**

(51) Int. Cl.

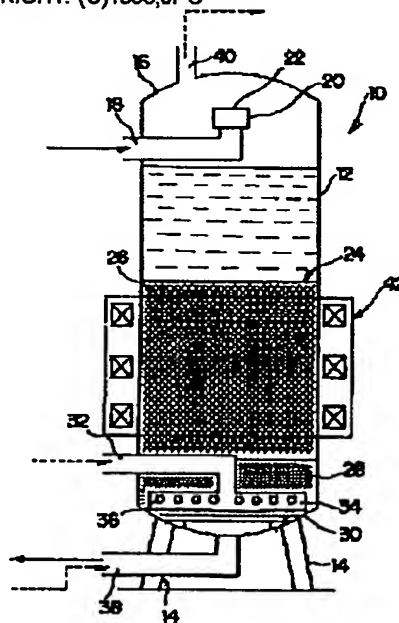
B01D 29/66
B01D 24/00(21) Application number: **07090549**(22) Date of filing: **17.04.95**(71) Applicant: **TAKENAKA KOMUTEN CO LTD**(72) Inventor:
KAYANO HIDENORI
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KAWAHITO NAOMI**(54) HIGH SPEED FILTER AND METHOD OF
WASHING FILTER MEDIUM USED THEREFOR****(57) Abstract:**

PURPOSE: To wash a fibrous filter medium with high accuracy by installing a filter medium bed densely packed with the fibrous filter medium in the intermediate part of a device main body and installing ultrasonic oscillating means in the prescribed outer periphery part of the device main body corresponding to the outer periphery part of the filter medium bed.

CONSTITUTION: In the prescribed outer periphery part of a device main body 12 corresponding to the outer periphery part of filter medium bed 24, plural ultrasonic oscillators 42 are arranged. When ultrasonic waves are oscillated, the soil stuck on the surface or the like of a fibrous filter medium 26 of the filter medium bed 24 is removed from the fibrous filter medium 26. Then, a compressor is driven to feed air into an air diffusing pipe 34 from an air feed pipe 32 and be jetted to the lower part of the device body 12. As a result, the fibrous filter medium 26 having small specific gravity is agitated with a water current generated by the air, and it is continuously subjected to ultrasonic washing while it is agitated. After that, backward washing water is fed to the lower part of the device

body 12 from a drain/backward washing water feed pipe 38. Besides, even at this time, the ultrasonic waves are oscillated.

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Application No: GB 0129711.8
Claims searched: 1 - 20

Examiner: Bridie Collier
Date of search: 16 May 2002

Patents Act 1977 Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK CI (Ed.T): B1D (DNCB, DNCK, DNCL, DNCX)

Int CI (Ed.7): B01D 29/62, 29/64, 29/66, 29/68, 29/70, 29/72

Other: Online : WPI, EPODOC, JAPIO

Documents considered to be relevant:

Category	Identity of document and relevant passage	Relevant to claims
X	DE 4118423 A (MICHEELS) See ultrasound generator 40	1-7,10, 15-18
X	DE 19844310 A (LANGE) See ultrasound generator 10	1-3,6, 7,10,15
X	FI 103325 B (RANTALA) See ultrasound generator 7	1-7,10, 15-18
X	JP 8281021 A (TAKENAKA) See ultrasound generator 42	1-3,6 7,10,15
X	US 5723051 A (FILTERWERK) See ultrasound generator 133, Fig 2	1-10,15-19
X	US 5102534 A (GABET) See ultrasound generator 11	1-7,10, 15-18

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.

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